***The Invented Self: An Antibiography, from Documents of Thomas A. Edison.* By David E. Nye. (Odense: Odense University Press, 1983. 229 pp. 87.50 DKr.)**

Reviewed by Paul B. Israel

"The deconstruction of Edison into a set of semiotic constraints may seem unintelligible, even to those versed in Derida's *Of Grammatology*" (p. 198). This confession, appearing on the last page of David Nye's *The Invented Self*, neatly summarizes a major problem with this work. Even the reader indoctrinated in the rhetoric of semiotics may have trouble understanding what it is that Nye has done and what contribution, if any, he has made to the theory of historical analysis. Attempting to use the Edison documents to write an analytical history using new models derived from semiotics, Nye has written a book that will prove unconvincing to most historians because of its self-proclaimed unintelligibility and its unnecessarily restrictive view of the historical enterprise.

Nye's principal goal is to replace a historical style concerned with causality, chronology, events, and people with one concerned solely with uncovering the underlying cultural systems found "expressed as structures in the documents" (p. 12). This rather obscure notion is not easily explained. Documents, and here Nye includes some nonliterary sources such as buildings and photographs, have inherent in them these underlying cultural systems, which it is the job of the semiotic historian to uncover. This is done by considering the sources, and here he claims no distinction should be made between "second-

ary" and "primary" sources, as texts that can be read in innumerable ways. It is in the multitude of possible interpretations resulting from these readings that the underlying cultural structures are made clear. At least that appears to be the theory.

Nye's theory derives from the work of semioticians and their belief in the "inadequacy of language as a form of representation" (p. 18). One wonders how they can hope to express anything of importance using language. It may be that it is this conviction in the inadequacy of language that lends an arbitrariness to their writings, making them seem obscure and unintelligible. Nye, for example, uses a rather confusing device called the "semiotic square," devised by A. J. Greimas, to explore oppositions in the reading of a text as a means of uncovering the underlying structures. One that Nye sees as central to Edison is the opposition of tinkerer to scientist and wizard to alchemist. He sets these in opposition to each other as means of explaining the contradictions within American society about science and technology. Although the first two terms, tinkerer and scientist, are not unique to Nye and are a perfectly good tool to explore American views on science and technology, the second pair, wizard and alchemist, are ones that Nye himself creates as oppositions. Yet he never explores the meanings of these terms to the society he is attempting to understand and his use of the words is just plain wrong. He claims that *wizard* denotes white magic and *alchemist* black magic. Yet both terms have been associated with both white and black magic, although it is *wizard* that has most commonly been associated with black magic. Rather than exploring this problem of language, Nye passes it over and uses language as he will to suit his purposes.

Nye does, however, have something of interest to say about Edison and American technology. After telling us that it is impossible from the disjoined sources to recreate a whole life and that we should be concerned only with exploring the possible Edisons that emerge from these sources, Nye does attempt to create a unified Edisonian philosophy of science, although it is really Edison's ontology that he is explaining. Nye creatively recreates Edison's belief that life consists of "temporary combinations of . . . indestructible life units and primoid particles into increasingly complicated forms" (p. 146). Inventions, in particular those made by Edison, then facilitated these combinations in a process of progressive evolution. Although Nye overemphasizes the role of this ontology in Edison's work and attributes to it all of his inventive activity, his discussion of its possible influences does suggest the importance of cultural sources for technological change.

In an earlier chapter, Nye makes a contribution to our understanding of the impact of Edison's ore milling operation, suggesting that the production technology used there helped to "move the heavy industry of Victorian America toward a work system which completely subordinated the worker to rationalized tasks. . . . The [mill] of 1895 had the structure of contemporary industry." For Nye, the Edison ore mill of 1895 is a "paradigmatic text read by American heavy industry in the twentieth century. Henry Ford acknowledged its influence in the creation of the assembly line for it embodied the principles of automation and mass production" (p. 70). In his examination of the mill's technology Nye examines the ways in which interlinked automatic machines and the assembly line were brought together by Edison twenty years before Henry Ford's Highland Park plant. In particular, his suggestion that Edison and an

assistant named Thomas Robbins developed the conveyor belt in its modern form is one that students of mass production will find striking.

The contributions noted above and others scattered throughout this work appear to be made almost in spite of the theory of semiotic history in which they are embedded. Indeed they are really a result of close and imaginative readings of the evidence, as is done by every good historian. Semiotics is only one potential tool that can be used in exploring the cultural structures that act as constraining influences on human society, a notion not new to Nye, and once these have been found, it seems to me that you have taken semiotic analysis as far as it can go. History is also concerned with explaining the particular, and this semiotics does not appear capable of doing. Thus Nye's approach is unnecessarily restrictive. He denies a whole range of interesting questions to historians because, according to semiotic theory, we cannot recreate the past. Yet in the very act of writing about the past, Nye has recreated it.

Nye's book will be of greatest interest to Edison scholars and philosophers of history. The former will be interested in his use of hitherto ignored documents and the occasional new insight, while the latter will be interested in his criticism of the current state of historical writing and his attempt to provide a new model. The more general reader will find that when Nye focuses his book on questions such as Edison's contribution to mass production, he provides some interesting insights into Edison and the industrial America in which he lived and worked. Unfortunately, they will find that these occasional points of interest will not be worth the trouble of struggling through Nye's semiotic swamp.

Paul B. Israel, an assistant editor with the Thomas A. Edison Papers, is coauthor of the forthcoming Edison's Electric Light: Biography of an Invention.